## Introduction

The 1999 U.S. Grain Exports: Quality Report is produced by the Federal Grain Inspection Service (FGIS) of the U.S. Department of Agriculture's Grain Inspection, Packers and Stockyards Administration. The report is the result of FGIS' efforts to determine, document, and disseminate critical information regarding U.S. export grain quality.

The 1999 report is the sixteenth edition of this annual summary of export grain quality. The report summarizes the quality of export wheat, corn, soybeans, sorghum, barley, sunflower seeds, and oats. Mixed grain, flaxseed, and rye are not included in this year's report; no lots have been reported in the past 3 years.

## Organization of the Report

The report contains chapters addressing export wheat, export corn, export soybeans, and other grains. Each chapter contains:

- \* standards and definitions for each grain,
- \* tables that clearly illustrate all factor result averages at each applicable U.S. grade level, and
- \* factor quality distribution graphs for selected factors.

In addition, an appendix contains figures illustrating select quantity and quality trends over time.

## Methodology

FGIS collects and documents information about export grain shipments in the automated Export Grain Information System (EGIS). This system contains one record for each export lot inspected and/or weighed. In the case of some railcar exports, each record may contain information from several lots which were aggregated to simplify internal reporting. For the purposes of this export quality report, only information from waterborne export shipments were used. Waterborne export shipments represented 94.9 percent of the total export lots in the EGIS database for 1999.

Generally, each EGIS record contains the quantity of the lot and the average factor results certified for the lot. The tables in this report contain descriptive statistics which summarize these lot quantities and the weighted averages. Where appropriate, tables are provided which show the number of lots and the quantity of grain which was used to generate the descriptive statistics. Many of the tables summarize factor averages by grade.

A U.S. grade is determined by analyzing the physical and biological factors present in the sample. Limits for the grading factors are established for each numerical grade. Grades range from U.S. No. 1 (highest) to U.S. Sample grade (lowest). When a particular grade is cited in this report, it includes lots certified at that grade plus lots certified with the "or better" designation. For example, U.S. No. 2 grade includes lots which were certificated as "U.S. No. 2" and lots certificated as "U.S. No. 2 or better." Factors that exceed the established limits, except for test weight, lower the grade. The established limits for test weight represent minimum requirements for each grade.

This report does not contain data on the volume of export grain in bushels. Listed below are the equations for converting the approximate quantity of grain from metric tons to bushels.

## **Conversion Equation**

Bushels = Metric Tons x 2204.622 Pounds Legal Test Weight/Bushel of Grain

Legal Test Weight Per Bushel for Specific Grains

Wheat = 60 pounds/bushel Corn = 56 pounds/bushel Soybeans = 60 pounds/bushel Canola = 50 pounds/bushel Sorghum = 56 pounds/bushel Barley = 48 pounds/bushel Sunflower Seed = 28 pounds/bushel Rye =56 pounds/bushel Oats = 32 pounds/bushel